# Medical Control Guideline: DRUG REFERENCE - FENTANYL

Ref. No. 1317.19

## Classification

Synthetic opioid

# **Prehospital Indications**

Multiple provider impressions: pain management

#### **Other Common Indications**

None

#### **Adult Dose**

**50mcg (1mL) slow IV push or IM/IN**, repeat every 5 min prn, maximum total dose prior to Base contact 150mcg

Contact Base for additional pain management after maximum dose administered: may repeat dose for a maximum total dose of 250mcg

#### **Pediatric Dose**

1mcg/kg (50mcg/mL) slow IV push or IM, dose per MCG 1309, or

1.5mcg/kg (50mcg/mL) IN, dose per MCG 1309

Repeat in 5 min prn x1, maximum 2 total doses prior to Base contact

Contact Base for additional pain management after maximum dose administered: may repeat dose for a maximum 4 total doses

#### **Mechanism of Action**

Narcotic agonist-analgesic of opiate receptors; inhibits ascending pain pathways thus altering response to pain, increases pain threshold, produces analgesis, respiratory depression and sedation

#### **Pharmacokinetics**

Onset is immediate; peak in 3-5 min; duration is 30-60 min

### **Contraindications**

Hypersensitivity

#### Interactions

Alcohol and other central nervous system depressants potentiate its effect

## **Adverse Effects**

Chest wall stiffness / Chest wall pain

Delirium / Convulsions (uncommon)

Muscle stiffness

Nausea and vomiting (most common)

Respiratory depression

### **Prehospital Considerations**

- Monitor respiratory status. Respiratory depression, when it occurs, may last longer than the analgesic effect.
- Administer slowly to decrease likelihood of chest stiffness, which can be life threatening.
- Onset of fentanyl is quicker and duration of action is shorter as compared to morphine. Unlike
  morphine, does not cause histamine release. Therefore, it is unlikely to cause hypotension in
  therapeutic dosages.
- Naloxone can be used for reversal if needed.

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